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Via E-Mail and ECFS Electronic Filing
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Honorable Tom Wheeler
Chairman

Mr. Julius Knapp
Chief, Office of Engineering and Technology

Federal Communications Commission
445-12th Street, SW
Washington, D.C. 20554

Re: **ET Docket No. 15-26**, *Amendments of Parts 1, 2, 15, 90, and 95 of the Commission's Rules to Permit Radar Services in the 76-81 GHz Band;*
ET Docket No. 11-90, *Amendment of Sections 15.35 and 15.253 of the Commission's Rules Regarding Operation of Radar Systems in the 76-77 GHz Band;*
ET Docket No. 10-28, *Amendment of Section 15.253 of the Commission's Rules to Permit Fixed Use of Radar in the 76-77 GHz Band;*
WT Docket No. 11-202, *Amendment of the Commission's Rules to Permit Radiolocation Operations in the 78-81 GHz Band.*

Dear Chairman Wheeler and Mr. Knapp:

Today, I write to you regarding the cited subjects on behalf of the Motor & Equipment Manufacturers Association ("MEMA"), which represents vehicle suppliers that manufacture original equipment and aftermarket components and systems for use in passenger cars and commercial vehicles.[1] Component suppliers are the largest employer of manufacturing jobs in the United States directly employing more than 870,000 Americans and generating a total employment impact of 4.2 million jobs.

Our members lead the way in developing advanced, transformative technologies that enable safer, smarter and more efficient vehicles, all within a rapidly growing global marketplace with increased regulatory and customer demands. Vehicle suppliers play a key role in the motor vehicle industry particularly in developing and deploying a whole host of Advanced Driver Assistance Systems ("ADAS"), vehicle-to-vehicle ("V2V") technology and other advanced vehicle safety innovations. Working collaboratively with vehicle

[1] MEMA represents its members through four divisions: Automotive Aftermarket Suppliers Association (AASA); Heavy Duty Manufacturers Association (HDMA); Motor & Equipment Remanufacturers Association (MERA); and, Original Equipment Suppliers Association (OESA).

AASA HDMA MERA OESA

manufacturers (a.k.a. original equipment manufacturers, or "OEMs"), suppliers are critical in the ongoing development and implementation of these technologies, which are the building blocks necessary for highly automated vehicles ("HAVs") to reach their full potential.

MEMA requests a timely resolution from the Federal Communications Commission ("Commission") regarding the above-captioned docket proceedings, relative to the Commission's proposed sunset of the 22-29 GHz ("24 GHz UWB"[2]) automotive radar authorization in the United States.[3] This issue, though ancillary to the main purpose of the Docket 15-26 proceeding (i.e., the allocation of the band 77-81 GHz for short-range automotive radars), is nevertheless urgent for automotive equipment manufacturers relative to near-term planning. Further delay in the resolution of this docket proceeding, including the 24 GHz UWB sunset provision, would be detrimental to the worldwide harmonization effort for automotive radars, and to the improved safety of persons and property that short-range radar technology ensures.

The point of the Docket 15-26 *Notice of Proposed Rulemaking* in this proceeding was to further the worldwide plan to consolidate automotive radars in the 76-81 GHz band.[4] The European Conference of Postal and Telecommunications Administrations ("CEPT") and the European Commission, and numerous countries in Europe and Asia have concluded that the 79 GHz band should be the long-term, globally harmonized frequency band for all ultra-wideband automotive radar applications, in lieu of 24 GHz UWB.[5]

The Commission proposed to grandfather, for the life of the vehicle, those 24 GHz radars that are already installed, so as to avoid the need to replace or discontinue the use of those radar systems. MEMA asks the Commission to confirm explicitly that existing, installed 24 GHz UWB equipment <u>will be</u> grandfathered for the life of the vehicle. Regarding narrow band vehicular radars (meaning 24 GHz ISM[6]), MEMA asks the Commission to continue to permit 24 GHz ISM narrow band <u>equipment</u> and that there is no impact on new certifications for 24 GHz ISM narrow band radars.

The Commission also presumed "that there appears to be no equipment certified to operate in the 16.2-17.7 GHz" and asked if it should delete portions of the rules relating to vehicular radars in that band.[7] In fact, MEMA notes that there is legacy equipment that utilizes the 17 GHz band. MEMA notes that this is a legacy issue and relates only to the

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[2] 24 GHz UWB refers to Rule Sections 15.252 and 15.515

[3] See, 47 C.F.R. §15.252.

[4] 80 Fed. Reg. at 12120, *Notice of Proposed Rulemaking and Reconsideration Order*, FCC 15-16, Feb. 5, 2015 in Docket 15-26 ("the Notice").

[5] The Notice in this proceeding at paragraph 32 justified the allocation of the 77-81 GHz band for automotive radars, in part because "…permitting vehicular radars throughout the 76-81 GHz band can also support industry efforts to consolidate vehicular radar into an internationally harmonized frequency band. (footnote omitted). The 77-81 GHz band is already available for SRR (short-range radar) applications in many parts of the world, including Europe, Australia, Russia, and Chile, and is in progress in many others.

[6] 24 GHz ISM refers to those operated pursuant to Rule Sections 15.249 and 15.245

[7] *Op cit* at page 14

continued maintenance and service life of the vehicle. Thus, it would be prudent of the FCC to also grandfather 17 GHz.

The Commission also proposed to prohibit the certification of new vehicular radars that do not operate in the 76-81 GHz range, effective 30 days from the date of publication of final rules regarding the 76-81 GHz band in the *Federal Register*. It also asked for comment as to how 22-29 GHz radars should be addressed relative to the transition to the 77-81 GHz band.

It is reasonable to: (1) cease new equipment authorization grants as of the effective date of a Report and Order in this proceeding; (2) grandfather equipment authorizations for 22-29 GHz (24 GHz UWB) vehicular radars granted prior to the effective date of the Report and Order; (3) continue to permit the maintenance and repair of those radars that are already installed and in use for the life of a motor vehicle without a time limitation; and, (4) continue to permit new installations of those 24 GHz UWB radars which have grandfathered equipment authorizations until a fixed sunset date. There is an anticipated sunset date of 2022 for radars in that frequency range in Europe,[8] which is sufficiently far in the future that to adopt the same timetable in the United States is not burdensome.

Absent an early date for ending 24 GHz UWB radar equipment authorizations and a firm sunset date for installation of new 24 GHz UWB radars in automobiles, there would be a disincentive to global harmonization of automobile radar technology at 76-81 GHz and an unnecessary delay in the redeployment of the 24 GHz UWB for other purposes.

Therefore, MEMA urges the Commission to quickly resolve this somewhat protracted proceeding, so as to:

- provide regulatory clarity to vehicle equipment manufacturers;
- encourage the worldwide harmonization of the 76-81 GHz band for vehicular radars in the public interest and in the interest of improved public safety; and,
- establish the sunset provisions for the 24 GHz UWB proposed in the Notice no later than Europe for consistency and as stated above.

Thank you for consideration of these comments. For more information, please do not hesitate to contact me at lmerino@mema.org or (202) 312-9249.

Respectfully submitted,

Leigh S. Merino
Senior Director, Regulatory Affairs

[8] The 77-81 GHz band was initially identified by the European Conference of Postal and Telecommunications Administrations (CEPT) as a "possible future home" for SRR operations that are forced to relocate from the 24 GHz range. Initially, the CEPT sunset date for 24 GHz UWB was 2014. It is now planned to be 2022.